thyrotoxicosis, two thirds of the affected sibling pairs shared both parental haplotypes. It was postulated that both parental haplotypes were important for the development of thyrotoxicosis. In other words the human leucocyte antigen gene contributing to the development of thyrotoxicosis may be inherited in a recessive fashion.5

Separate alleles (Bw22 and B17) have been suggested as markers for thyrotoxic periodic paralysis. It remains unclear whether the mode of inheritance of thyrotoxic periodic paralysis is similar to that of thyrotoxicosis per se. This family provided us with a unique opportunity to glimpse the genetic mechanisms occurring in thyrotoxic periodic paralysis. The occurrence of identical haplotypes in the sibling pair who had thyrotoxic periodic paralysis suggests that the mode of inheritance of thyrotoxic periodic paralysis and thyrotoxicosis may indeed be similar.

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## Notification of tuberculosis: Can the pathologist help?

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The incidence of tuberculosis in Great Britain has declined steadily over recent decades, the trend being confirmed by statutory notification data.<sup>12</sup> In 1986 over 6000 cases of tuberculosis were notified but this figure may be too low, for ambiguities and inaccuracies are recognised to exist in the notification system in England and Wales.<sup>3</sup> Data for the United States show that 37% of cases go unreported.4

For many years in Scotland it has been the practice to notify all positive bacteriological results to cover possible failures in notification by clinicians. We wondered whether a similar procedure of notification for positive pathological biopsy specimens would further improve notification practices. We have therefore identified pathological diagnoses of tuberculosis over four years, examined their characteristics, and related the findings to notification data.

## Methods and results

All pathology reports issued from the University Department of Pathology, Edinburgh, in which tuberculosis was listed as the primary diagnosis or in the differential diagnosis were examined for the years 1981-4. The slides of all cases were reviewed. Patients' case notes were scrutinised for details of diagnosis, treatment, and whether a respiratory physician had been consulted. Cases were checked against the local tuberculosis register for the corresponding years to see whether they had been notified.

Pathology reports were coded as follows: (A) a firm pathological diagnosis of tuberculosis in which acid fast organisms were present in the sections; (B) strongly suggestive or firm diagnosis of tuberculosis made on morphological grounds, though acid fast bacilli were not seen; (C) cases in which a firm diagnosis of inactive, calcified, or healed tuberculosis was made; (D) cases in which tuberculosis was mentioned in the differential diagnosis for confirmation or exclusion on clinical grounds.

Eighty two sets of case notes and pathology reports were examined. Eight sets of case notes could not be traced. Thirty four cases were coded A, 35 B, five C, and eight D.

Codes A and B-The table gives the age and sex characteristics of the 69 patients coded A or B by the pathologist together with information on the number of notifications and number of consultations with a respiratory physician. Of patients in whom acid fast bacilli were identified, 11 (32.4%) were not notified, and of those in whom acid fast bacilli were not seen but a firm pathological diagnosis was made, 15 (42.9%) were not notified. Only eight of the 69 patients were not seen by a respiratory physician. One of the unnotified patients had acid fast bacilli in a sputum smear. Sixty two of the the 69 patients were treated for tuberculosis. Of these 62 patients treated, and therefore considered to have active disease, only two thirds were notified. In this group 50 patients (81%) had chemotherapy for the standard six or nine months. Unusual treatment combinations, all based on rifampicin, were employed in 12 patients, on four occasions by chest physicians. Failure to notify was equally common in physicians and surgeons, though the comparatively larger number of pathological diagnoses on material obtained by surgeons (48 v 21) led to a greater number of failed notifications.

Codes C and D—None of the 13 patients coded C or D was notified or treated as a case of tuberculosis.

Age and sex characteristics of patients coded A or B with details of number notified and number seen by respiratory physician

	Code A	Code B	Total
Mean age in years (range)	53 (9-80)	52 (11-87)	53 (9-87)
No male	21	16	37
No female	13	19	32
No notified	23	20	43
No (%) not notified	11 (32.4)	15 (42.9)	<b>26</b> (37·7)
No not seen by respirator	v		. ,
physician	<u>4</u>	4	8
Notified	2	1	3 .
Not notified	2	3	5

## Comment

This study shows that almost 40% of patients (26/69) with a convincing combined clinical and pathological diagnosis of tuberculosis were not notified, in keeping with findings in the United States.<sup>+</sup> Most failures of notification occurred in surgical wards, though physicians also failed to notify positive pathological diagnoses of tuberculosis. Fortunately, treatment was conventional in most cases and respiratory physicians were consulted in most. Our study suggests that all positive pathological diagnoses of tuberculosis should be notified to the local health board to ensure that notifications reflect the true incidence of disease. This would also ensure that appropriate contact procedures can be instituted.5

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